

Amendments to the Claims:

Please amend claims 39-41, 46-47, 49-50, 52 and 55 and cancel claim 48 as follows. This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

1-38. (Cancelled)

39. (Currently Amended) The A monoclonal antibody or antigen-binding fragment thereof that binds to a type III epitope of pleiotrophin (PTN) and neutralizes at least one biological activity of PTN.

40. (Currently Amended) The antibody or antigen-binding fragment thereof according to claim 39 comprising any one of the following:

(a) an antibody or antigen-binding fragment thereof that binds to an epitope, which is substantially the same as an epitope [[as a]] of the monoclonal antibody or antigen-binding fragment thereof produced by a hybridoma cell line selected from the group consisting of 3B10, 4B2, 10, 17, 24, 25, 26, 27, 31, 41, 50, 60, 87, 3-4A, and 3-11FA;

(b) a monoclonal antibody or antigen-binding fragment thereof produced by a hybridoma cell line selected from the group consisting of 3B10, 4B2, 10, 17, 24, 25, 26, 27, 31, 41, 50, 60, 87, 3-4A, and 3-11F; or

(c) an antibody that competitively inhibits binding of a PTN polypeptide to an antibody comprising a sequence selected from SEQ ID NOs: 3, 5, 6, 7, 8, 10, 11, or and 12,

wherein the antibody or antigen-binding fragment comprises: (i) a light chain CDR1, (ii) a light chain CDR2, (iii) a light chain CDR3, (iv) a heavy chain CDR1, (v) a heavy chain CDR2, and (vi) a heavy chain CDR3.

41. (Currently Amended) The antibody or antigen-binding fragment thereof according to claim 39, wherein said biological activity is selected from the group consisting of: receptor binding activities, signaling transduction activities, and ~~or~~ cellular responses induced by PTN.

42. (Previously presented) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody inhibits cancer cell growth.

43. (Previously presented) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody inhibits cancer cell proliferation.

44. (Previously presented) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody inhibits metastasis of cancer cells.

45. (Previously presented) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody inhibits angiogenesis induced by cancer cells.

46. (Currently Amended) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody comprises an amino acid sequence with at least about 90% sequence identity with a sequence selected from SEQ ID NOs:3, 5, 6, 7, 8, 10, 11, or and 12,

wherein the antibody or antigen-binding fragment comprises: (i) a light chain CDR1, (ii) a light chain CDR2, (iii) a light chain CDR3, (iv) a heavy chain CDR1, (v) a heavy chain CDR2, and (vi) a heavy chain CDR3.

47. (Currently Amended) The antibody or antigen-binding fragment thereof according to the claim 39, wherein said antibody comprises an amino acid sequence selected from SEQ ID NOs: 3 or and 8,

wherein the antibody or antigen-binding fragment comprises: (i) a light chain CDR1, (ii) a light chain CDR2, (iii) a light chain CDR3, (iv) a heavy chain CDR1, (v) a heavy chain CDR2, and (vi) a heavy chain CDR3.

48. (Cancelled).

49. (Currently Amended) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody is selected from the group consisting of a ~~polyclonal antibody~~, chimeric antibody, humanized antibody, and or a fully human antibody.

50. (Currently Amended) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antigen-binding fragment is selected from the group consisting of Fab fragment, (Fab')₂ Fragment, and or a Fv fragment.

51. (Previously presented) The antibody or antigen-binding fragment thereof of claim 39, wherein the antibody is conjugated to a cytotoxic agent.

52. (Currently Amended) A polypeptide comprising an amino acid sequence selected from SEQ ID NOs: 3, 5, 6, 7, 8, 10, or 11, and 12,

wherein the polypeptide comprises: (i) a light chain CDR1, (ii) a light chain CDR2, (iii) a light chain CDR3, (iv) a heavy chain CDR1, (v) a heavy chain CDR2, and (vi) a heavy chain CDR3.

53. (Previously presented) The antibody or antigen-binding fragment thereof according to claim 39, wherein said antibody binds to a PTN epitope at a binding affinity of at least $10^6 M^{-1}$.

54. (Previously presented) A pharmaceutical composition comprising the antibody according to claim 39 and a pharmaceutical carrier.

55. (Currently Amended) An isolated monoclonal antibody produced by the method comprising:

1) selecting a host animal;

2) immunizing said host animal with a fusion protein comprising a said protein connected with a known T-cell epitope derived from a different protein;

3) isolating a lymphoid cell from said host animal;

4) fusing said lymphoid cell to a myeloma cell, so that a hybrid cell is created;

- 5) cultivating said hybrid cell; and
- 6) isolating a monoclonal antibody against said PTN protein produced by said hybrid cell.